A Delicate Balance: Service-Learning in Teacher Education

Douglas Ball, Ph.D¹ Nomsa Geleta, Ed.D.²

Abstract: A consortium of teacher education professors worked together in a 3 year project to infuse service-learning into their courses. Although they had participated in the same preparatory workshops, they largely integrated it in ways that appeared to eclipse S-L orthodoxy. To understand their variances we examined the choices and contexts that shaped their "hybrid" projects. Our findings suggest a schema for emergent service-learning in teacher education. KEYWORDS: Service-learning pedagogy, experiential education, infusing service-learning in teacher education curriculum, instructional strategies, community partnerships, contextual diversity, inter-institutional collaboration, curriculum transformation.

I. Introduction.

Service-learning (S-L) requires a delicate balance not unlike a Chinese circus act where tiers of sublime acrobats cross an aerial span on a miniscule but sturdy fiber. In S-L the tightrope is the connection between course content and a need in the community. Crossing this span requires planned collaboration, yet it is reasonable to expect that each performer may have a slightly different view of what, how, and why they are attempting this daring feat.

The literature is replete with discussions about illegitimate interpretations of S-L as well as about the pitfalls associated with assessing and evaluating its impact.

Service-learning programs are *distinguished*...by their intention to equally benefit the provider and the recipient of the service....[Furco (1996)]. Thus service-learning programs must integrate service into course(s) and *be tied to measurable objectives* that assess as well as enhance both the learning and the service. [Shastri, (1998), p. 5, italics added]

This article examines the unique ways a consortium of professors from three teacher education programs attempted the daunting feat of initiating S-L in their courses. We will discuss how they interpreted S-L pedagogy in ways that produced "hybrid" service-learning and, paradoxically, also produced a valid schema for emergent S-L in teacher education. Moreover we will make connections between the professors' shortcuts and notions we had found in the extant literature on S-L in teacher education, including:

¹ Assistant Professor, Education Department, with focus on Special Education, Salisbury University, 1101 Camden Ave., Salisbury, MD 21837. deball@salisbury.edu

² Associate Professor and Director of Graduate Studies, her focus is on Multicultural Education, and Curriculum Development, Salisbury University, 1101 Camden Ave., Salisbury, MD 21837. negeleta@salisbury.edu

(1) how contextual constraints as well as the diversity of settings affected professors' interpretations of S-L [Shumer (1997)]; (2) how S-L competencies can be sequenced incrementally throughout a teacher education program [Wade (1998)]; and (3) how Shumer's modified process, Plan-Act-Reflect-*Evaluate* (2000), might be a wiser model to use than the basic Plan-Act-Reflect loop. We will also discuss another irony that emerged from our S-L projects - one that we had not found in the literature - how unplanned outcomes provided unexpected enrichment for the teacher educators' pedagogies as well as striking incidental learning for their education students.

This discussion may provide much needed scaffolding for beginners who face the complex demands of doing S-L, especially for planning and measuring the impact of S-L conducted in teacher education courses.

This study evolved from a three-year project by the Teacher Education Consortium in Service-Learning (TECSL) that was funded by a grant from the Learn and Serve America program of the Corporation for National and Community Service. As authors of this present study we were not only the grant evaluator and its director respectively, but also involved in most of the consortium activities. This article contains our interpretations of what happened during the project, and is based on our participant observations as well as on qualitative data analysis, particularly of the participants' final narrative reports contained in our project monograph [TECSL (2003)].

II. Project Background

A. Purpose

The impetus for this collaboration stemmed from a state mandate for service-learning as a high school graduation requirement: students must complete 75 hours of service before graduating. Typically such mandates do not allow for adequate faculty development. The purpose of this project was to develop a cadre of teacher educators who would become proficient enough with S-L pedagogy so they could prepare teachers with the skills needed to conduct S-L in their future classrooms.

B. Participants

The consortium project involved three very diverse institutions with varied missions, histories, and settings, but all from the same university system located in a mid-Atlantic state. The first, a historically black institution serving an inner city community with a high crime rate, the second (the lead institution), a historically white campus located in a semi-rural area with a high dropout rate, and the third a predominantly white institution, located in a suburban area noted for its affluence. The faculty participants, five from each university (n=15), also represented diverse backgrounds and they infused S-L into a variety of courses, primarily teacher education courses but including several general education courses that supported teacher education. Each university was allowed to create its own procedure for participant selection based on how they envisioned integrating S-L into their programs. [NB: As we began the project one university education department was bearing the inordinate pressures of national accreditation and therefore decided it best to select several adult education and sociology instructors for their team.] During years 2 and 3, approximately 360 students, mostly undergraduate

education majors, participated in the courses where S-L projects were implemented during two and up to four semesters. Table 1 lists each course and provides a brief description of its concomitant S-L project.

C. Project Activities

Preparatory S-L workshops. Several objectives focused the consortium's efforts, which would enable professors to transform their curriculum with S-L pedagogy. During the first year faculty participated in a variety of collective activities that combined training and resources with opportunities to network and dialogue as they revised their syllabi. The main objective for the first year was to introduce faculty to S-L theory and strategies for implementing and assessing service-learning outcomes. Essentially participants were taught these five S-L competencies:

- 1. Identify Community Need
- 2. Establish partnership and collaboration with community to develop S-L project
- 3. Plan Action Reflection (S-L Process)
- 4. Identify relationship between S-L project & course content
- 5. Sharing results: assess the impact of S-L on all involved:
 - a) Community partners or K-12 students, b) Self

The outcome for year one was for each faculty member to develop a syllabus that integrated S-L pedagogy. The main objectives for years two and three were for faculty to implement these S-L projects in their courses and to write summative reports about their experiences for our project monograph [TECSL (2003)].

II. Discussion of the Relevant Literature

A. Complexity of S-L in Teacher Education

"Service-learning is a complex process that requires careful planning, implementation, and evaluation to be successful" [Driscoll et al (1998), p.8]. The complexity of S-L in teacher education emanates from a swarm of variables, which demand equal attention and include, (1) multiple layers of decision making; (2) multiple components of S-L planning, implementation and assessment; (3) multiple participants; and (4) multiple objectives that emerge from the interaction between community needs and course content. The multi-component S-L process is magnified in teacher education courses, especially taking into consideration both long and short-term objectives.

....to ensure that pre-service teachers own S-L experiences, [teacher educators] model the same effective practices they will apply in their future teaching, teacher educators should apply these same standards in planning, implementing, and evaluating their pre-service teacher education programs. [Paris & Winograd (1998), p.28]

However scant models exist for assessing the effects of S-L on students in teacher education courses [cf. Furco & Billig (2002)]. According to Eyler (2000) there have been no systematic attempts to test alternative, theoretically-anchored models of instruction,

TABLE 1 Courses and S-L Projects

Course	S-L Project		
EDUC 408 Measurement &	Students created workbook packets to assist children and		
Evaluation	their caregivers to prepare for standardized state tests.		
WLIT 205 Honors World Literature	Freshman students wrote a play for local elementary		
	schoolchildren after onsite observations and discussing ways		
	to encourage them to read.		
ADLT 513 Sociology of	Grad students in Adult ed. course researched historical,		
Community	demographic, and political aspects of local government.		
-	Each student developed a community action_project and		
	made presentations to community group.		
ADLT 533 The Aging Process	Grad. students in Adult education designed and conducted		
	projects focusing on needs of the elderly.		
EDUC 408 Children's Literature	Students created strategies to make literature accessible to		
	ELL students; read to children in migrant worker program		
	and then evaluated their strategies.		
EDUC210 School in a Diverse	Students created literacy learning "kits" based on their field-		
Society	based interactions with high-risk students from diverse		
	backgrounds.		
EDUC 210 School in a Diverse	Students in their first teacher education course <i>conducted</i>		
Society	WEB research on S-L definition, students had to demonstrate		
	in reflective writings that they could distinguish between		
	volunteering and S-L and then connect it to their field		
	experiences (classroom observations and assisting).		
EDUC 306 Principles of Instruction	Students learned how to and created S-L units coordinated		
	with their concurrent methods classes, which involved		
	classroom observations and implementation of lessons. Site		
	visits to local organizations were required.		
ELED 313 Social Studies Methods	Students conducted a donation drive to collect school		
	supplies for children in Afghanistan.		
ELED 312 Science Instruction	Students improved existing learning "kits" and presented		
	them in program at local zoo for staff, children, & parents		
ECED 201 Intervention & the	Students identified community need, <i>volunteered time in a</i>		
Young Child	number of local institutions, which ranged from hospitals for		
	children with disabilities to nursing homes.		
FIED 262 M IC IS 1E1 C	Students interviewed principals & teachers and engaged in		
ELED 363 Multicultural Education	small group tutoring as well as a community walk.		
EDUC 470 Literacy Tutoring	Reading clinic as university-based S-L Project		
SCED 319 Survey of Educational	Students were assigned to do four hours of S-L and chose		
Programs	their own projects based on their interests and schedules		
ECED 342 Primary Curriculum	Students created S-L projects with careful adherence to the		
	S-L process including: a recycling project with multiple		
	cross-curricular components; a project that address an		
	organizational need at a Muscular Dystrophy Camp, and a		
	Save the Bay project with 2 nd graders.		

reflection, or S-L project planning. She has posited concerns about designing assessments (including reflection!) that adequately capture the precise nature of learning in a complex context:

....we accumulated a lot of evidence about the impact of service-learning on college students, but this research has relied on surveys and other simple measures which do not capture the most important intellectual outcomes of the experience. We know that S-L has a small but consistent impact on attitudes and perceptions of self, but we have less evidence for its impact on learning and cognitive development and no evidence of its effect on lifelong learning and problem-solving in the community. [Eyler (2000), p.6]

This begs the question: how can teacher educators infuse S-L with *all* its components and then measure its effects on the students' ability to conduct S-L in the future? Given the time constraints within a typical teacher education courses (15 weeks) combined with the pressures of standards driven curriculum (i.e., state testing standards, accreditation standards, and federal mandates) infusing S-L in a teacher preparation course and evaluating its effects on all participants becomes a seemingly unwieldy and indeed complex task. The following comment, then, is not hyperbolical by any means: "Our general conclusion is that S-L is such a complex process that it requires a complex and comprehensive assessment model" [Driscoll et al. (1998)].

B. Planning Questions

Fortunately the literature on S-L in teacher education *does* offer ample guidance to help beginners "smoke out" planning, implementation, and assessment issues. "Service-Learning and evaluation...are intimately linked through the questions and learning activities that drive the program" [Shumer (2002), p.183)]. Table 2 contains a list of 25 questions that we had culled from the literature [Eyler & Giles (2002); Shumer (2000); Swick et al (1998); Darling-Hammond & Synder (1998)] and that were presented to our faculty participants during the workshop on S-L assessment [Ball (2002)].

How did the consortium teacher educators heed these considerations and moreover to what extent did they model the "complete S-L package" for their education students?

III. Method

A. The Struggle over Assessment

Participants struggled to decide which of two outcomes would be the focus of their assessment: (1) changes in students' attitudes and beliefs about service or (2) students' learning of the five S-L competencies. On the eve of actual implementation of their S-L projects, the only discernable assessment plan was in fact a Q-sort that one participant had designed to measure the former. But since the purpose of the consortium project was to infuse S-L in education courses so students could learn the skills to do it, we had to devise a measure that would document *that* learning, i.e., their acquisition of S-L competencies.

TABLE 2 Twenty five Planning Questions

- 1. What outcomes in my teacher education course are related to S-L outcomes?
- 2. In my teacher education course to what extent will I be able to implement a S-L project?
- 3. Do I understand the purpose(s) of assessing and evaluating S-L activities in my course?
- 4. Can candidates differentiate between S-L and volunteerism, community service, or clinical experiences?
- 5. Can candidates identify S-L practices, including how context affects the process and form of the project? Do they understand how to adapt given constraints?
- 6. How has S-L experiences helped them to develop reflective practices? To problem solve in complex settings, to work collaboratively?
- 7. Has the S-L experience revealed to my students their assumptions, preconceptions, or misconceptions about the community and its people?
- 8. How might this S-L project create negative effects for those involved?
- 9. What have they learned about their community?
- 10. Do my students understand how to measure the impact of S-L on both their future students' and the community need? Can they set goals and outcomes?
- 11. Did I provide adequate opportunities for them to reflect in structured ways?
- 12. Were goals and outcomes clear so that candidates understood the purpose(s) of the S-L project as well connect to the course content?
- 13. How did I model for my students the S-L competencies?
- 14. What impact has the S-L project had on my pedagogy? My course?
- 15. Did I use authentic assessments and multiple sources of reflections: journals, discussions, writing assignments, displays, Web Searches, and presentations in combination with traditional measurements: teacher designed questionnaires, tests, and portfolios, to evaluate specifically desired outcomes of the S-L activities?
- 16. Did I enable students to connect S-L with significant school reform efforts such as multicultural education, problem-based learning, democratic education, cooperative learning, and last but not least standards-based learning?
- 17. Have I with my colleagues discussed how S-L competencies could be distributed across our teacher education. curriculum?
- 18. Are students applying skills they have developed in their courses and practica to their S-L activities?
- 19. Are the students encouraged to connect their S-L experiences with their future profession?
- 20. Are students developing caring and compassion as a result of serving others? Are there other effects on my students, such as increased understanding of and commitment to social justice, civic responsibility, etc.?
- 21. How will I gauge to what extent pre-service teachers will be able to implement S-L in their future classrooms?
- 22. Should I provide them with a clear set of guidelines to help them when they implement S-L in their future classrooms?
- 23. To what extent were my students co-creators in the process of developing and planning the S-L project?
- 24. Do my students understand the need for S-L in our global society?
- 25. What are my students' assumptions about serving people in their community?

Assessment tool. Our assessment method would need to accommodate a variety of needs and constraints, such as contrasting course content, instructional styles, research agendas, department priorities, etc. Therefore it was necessary to provide an assessment tool that was somehow flexible, basic, reliable, and credible. For parsimony and efficacy, we proposed a framework that we had adapted from an assessment model created at Portland State University [Driscoll et al. (1998)], particularly their matrix entitled, "Mechanisms to Measure Impact" (Figure 1). This adapted model [Ball (2003)] provided consortium professors with a framework for measuring essential S-L outcomes – particularly how the teacher candidates had learned the five S-L competencies. It represented a convenient menu so professors could select the techniques that best suited their needs, beliefs, and situational constraints.

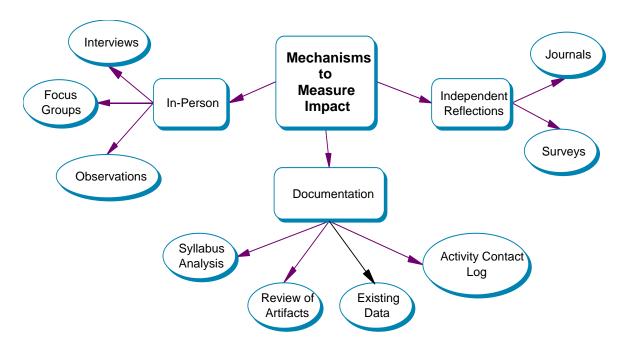


FIGURE 1: Assessment Model: "Mechanisms to Measure Impact"

Adapted from the State University of Portland's "Assessing the Impact of Service-Learning: A Workbook of Strategies

B. Data Collection

Multiple sources of formative and summative data were collected during the three year consortium project. Annually we gathered qualitative data to evaluate our progress toward grant goals. From our first, we collected assessment data that included participants' evaluations of the preparatory workshops and their pre- and post reflections about their grasp of S-L pedagogy; and from years 2 and 3, we gathered their revised course syllabi, their documentation of their students' learning, and their summative reports. The final reports, which comprised a large part of the TECSL monograph (2003),

were each professor's narrative and reflections about their S-L experiences and it's effects on both their own pedagogy and on their students' growth.

Eventually we had analyzed these data sources to determine how participants infused S-L projects in their courses, specifically for evidence that they had incorporated the five S-L competencies and for evidence showing to what degree their education students could demonstrate what they had learned about the S-L process. From our data analyses we wrote annual project evaluations reports [TECSL (2002, 2003)], and we have since conducted content analysis of both our annual evaluations and the professors' summative reports for the basis of this current discussion.

Participant observation. As grant evaluator and director respectively, we both had adopted the role of participant observer in order to closely follow the S-L learning and application process and to obtain firsthand a perspective on the consortium activities. In addition during the first year both of us made presentations at the preparatory workshops, but only one of us had infused S-L in an education course during this project.

Table 3: Assessment Methods & S-L Competencies Assessed

		Year 2: # of	
	Year 1: # of courses	courses where	S-L Competency
Method of measuring	where assessment	assessment was	measured*
outcome	was used $(n = 36)$	used. $(n = 42)$	(#1-5)
Student Reflections;	15	15	#3, #4, #5
journals, essays			
Class Discussions	7	7	#3, #4, #5
Tests	2	2	#3, #4, #5
Surveys	1	6	#5
Logs/ Project plans	1	1	#2, #3, #4
Presentations	10	10	#5
Artifacts: Portfolios,	0	0	0
Video, field notes			
Interviews	0	0	0
Observations	0	0	0
Focus Groups	0	0	0
Other student	0	1	S-L defined
Projects			

^{*}Five S-L Competencies: 1= Identify Community Need

IV. Results

Table 3 shows the results from the semesters during which professors implemented their S-L projects and indicates both the measurements that they selected and which S-L competencies they assessed. This data clearly shows that participants relied most heavily on student reflections to gauge the impact of the S-L projects on

²⁼ Establish partnership and collaboration with community to develop S-L project

³⁼ Prepare-Act-Reflect (P-A-R)

⁴⁼ Identify relationship between S-L project & course content

⁵⁼ Sharing results: evaluate/assess the impact of S-L on: a) Community or K-12 students, b) Self

students outcomes. It also reveals that certain competencies were neglected. A further analysis of how S-L competencies were incorporated is shown in Table 4.

Table 4 shows that professors placed the greatest emphasis on Competency #3 (P-A-R) and on one aspect of #5, (Sharing results: assessing impact on self). Only 58% of the teacher educators reported that they themselves had identified the community need for their students and that establishing the community partnership had not been an outcome for their students, but that 38% of professors had assumed this responsibility. Moreover only 13% indicated that they had addressed competency #5b (Assessing impact on community partners or K-12 students).

TABLE 4: Five S-L Competencies Addressed in Project Courses

	% Courses (n=15) where
S-L Competency	competency was addressed
1. Identify Community Need	58%
2. Establish partnership and	33%
collaboration with community	
to develop S-L project.	
3. S-L Process: Preparation-	100%
Action-Reflection (P-A-R)	
4. Identify relationship between	17%
S-L project & course content	
5. Sharing results: how to	
evaluate/assess the impact of	
S-L on all involved:	
1) Community or K-12	13%
students	
2) Self	100%

V. Discussion

A. Shortcuts to S-L?

At first glance these results were confounding; it seemed that professors had taken shortcuts to S-L. Obviously something had eclipsed the S-L model for best practices as had been represented in the preparatory workshops. According to Shumer, adaptation of S-L is not an altogether uncommon heresy:

In implementing service-learning, teachers [tend] not [to] emphasize the importance of determining service needs. Neither do they emphasize the ongoing assessment of the impact of the service delivery to determine its value and its effectiveness. Yet these two program necessities are perhaps the most essential elements of any experiential or service-learning initiative. [(2002), p.183-84].

Most of the teacher educators had not fully incorporated all five S-L components, although some managed to include more than others. To give credit where it is merited,

one education department excelled at integrating course content with genuine community need through service-learning [e.g., Brooks (2003); Gilliam (2003); Santor (2003)]. As we had examined the different projects in the three university departments, there was strong evidence that the projects from the inner city setting were the most sensitive to the needs of the people in their community. This resulted in unique components in their S-L projects, especially with regards to identifying community needs, establishing partnerships, providing relevant service, *and* even obtaining feedback from recipients. How and why the S-L projects in this setting were so exemplary is worth further investigation, particularly to grasp how the sensitivity of this campus and the uniqueness of its community's needs inspired a heightened quality of service-learning.

B. Legitimate S-L?

In hindsight it may have been unrealistic to expect that each course would produce evidence for all five S-L competencies; however, this realization did not emerge until after the first semester when professors submitted data that revealed how they had documented their students' learning. Clearly the data in Tables 4 and 5 above as well as the contents of professors' final reports [TECSL (2003)] suggest considerable variance from S-L orthodoxies for preparation, implementation, and assessment.

Since most of the projects had not included all five competencies, at first glance some projects seemed barely discernible from field-based practica or typical volunteer service. How could pre-service teachers learn to implement S-L by looking up its definition on the Internet and then by observing in randomly assigned classrooms for three to four hours per semester? How can clinical practica be called S-L if teacher candidates never leave the confines of their university classroom? And how on earth could pre-service teachers establish a community partnership when the recipients were schoolchildren in Afghanistan? Furthermore was having teacher candidates reflect on these experiences at semester's end a sufficiently robust assessment?

C. Resolution.

As it turns out these concerns were neither new nor unique. "It is not possible to include all S-L best practices," [Shumer (2000) p.2]. Moreover as we unraveled our skepticism over the legitimacy of these S-L projects, implications for S-L in teacher education began to emerge. Each project was designed and implemented in a different way. Our hybrid S-L projects may confirm that there is not a universal S-L design or model - one size does not fit all - and perhaps this will be particularly evident in doing S-L in teacher education.

....ultimately it is not easy to create high quality S-L experiences in pre-service teacher education coordinating the logistics of involving students in the community, structuring effective reflection activities and assignments consistent with course goals, and finding the time to plan and coordinate projects with various community agencies are just a few of the challenges that face ambitious professors.... [Wade et al. (1998), p. 127].

Translated into the vernacular, an educator's concern will naturally be: "What do I take out of my course so that I can put S-L in?" [cf. Shumer (1997)]. So how and why

did the professors arrive at their decisions that bypassed S-L best practices and produced these hybrid S-L projects?

D. Understanding S-L Variance

We needed to develop a perspective for understanding how the participants had distilled S-L theory and best practices, and thus we began to consider the emergent nature of their work. Upon initial reflection their variances seemed due to the range of their individual needs and the contextual constraints they had faced. S-L looked different in different contexts. A closer look at their work revealed further explanations for the paths they took and also provided valuable implications for doing S-L in teacher education. *E. Sequential Program Infusion*.

Patterns emerged from our analyses of the S-L project data that suggested a developmentally appropriate schema for S-L infusion across education department courses. Some professors had gone further with S-L than others because their courses allowed them to make larger connections or broader transformations. The research literature also supports this emergent schema. According to Shumer (1997):

As we begin to prepare teachers for S-L, we must acknowledge the diversity of settings and focus, preparing them for all possibilities. There is no single S-L program, teachers must know how to conduct programs across the continuum and adapt models to fit local settings. (p.2)

This certainly provides valuable implications for initial stage S-L in teacher education programs. If carefully coordinated within the teacher education curriculum, students would experience S-L in increments that would increase demands over time and moreover increase compatibility between course content and S-L requirements. Wade et al. (2000) proposed this very scenario: a foundations course would begin with S-L basics (e.g., how service-learning is distinguishable from volunteerism) and include an appropriate but limited service field experience; then through the remaining course sequence the demands of pratica would increase incrementally until the candidate's internship, when she would conduct a full-scale S-L project. Looking at the S-L projects infused in the courses at all three universities clearly suggests that a similar implementation (developmentally appropriate infusion throughout the course sequence) somehow occurred, but in an unplanned and apparently uncoordinated manner. Taken individually the S-L projects did appear illegitimate, but viewed in the context of its teacher education program, shortcomings were transformed into veritable developmental steps.

F. Integrating S-L: Our Scenario

To further illustrate how S-L found its niche in our teacher education programs, we present a scenario describing how it was infused by five professors in one university department.

Consider first a foundations course in which the professor assigned her students (taking their first education course) to discover the differences between S-L and volunteerism through their own self-guided process of inquiry. After researching

background information about S-L on the Internet and being assigned field placements in local classrooms with high diversity, education students' wrote reflections in which they had to distinguish whether their experiences were S-L or volunteering. One student wrote in her reflection:

When I arrived at the school...[the teacher] informed me that I would only be observing...I was a little disappointed because I thought I would be able to interact with the children...I would consider my experience a service-learning experience rather than volunteerism because I benefited ...as well as the students.... Although I only sat at the back of the room, the students would greet me and I feel they looked forward to my being there. I have never been in an elementary school looking at things through the eyes of the teacher. I do not think I would of totally understand the pieces of this course had I not been able to go to the elementary school and see it with my own two eyes...[Bowden (2003), p.19]

In a different configuration of this foundations course, another professor [Geleta (2003)] assigned students to create literacy "kits" for local students with high-risk backgrounds. When teacher candidates attempted to assessed these students' literacy needs in order to create appropriate materials, they realized that they needed to know more about both literacy learning and the students' home and community backgrounds. This set the stage for their university classroom discussions about issues of equity and power. The instructor learned from her education students that S-L pedagogy is,

....very complex and requires a high level of tolerance for ambiguity. Also it is more challenging to teach students this tolerance, who throughout their schooling were socialized otherwise. I had to deal with "what do you really want me to do?" questions. In all cases I directed my students back to the communities to find the answers...needless to say that was often a frustrating experience to some. However students learned that they were capable decision-makers, a skill that is crucial in the classroom. (p. 25)

At a higher level in the same department of education, students in two separate methods courses (science and social studies respectively) assumed even greater responsibilities for their S-L projects. In the social studies course the students themselves determined the community need and developed the plan of action. Although the S-L project they had selected involved recipients in faraway Afghanistan, the professor supported their decision because of the world-altering events that affected the Middle East during the fall of 2002. In the students' reflections this distance S-L project appeared to have produced uncertain learning.

Unfortunately, this project did not increase my awareness of Afghanistan. I must admit that the media was my informant about the whole situation....The project did spark my interest about the children of Afghanistan, but I did not learn anything other than about the children's disadvantages. [Jenne (2003), p.47]

These students rallied the local community through various means and conducted a successful drive to collect school supplies for Afghani schoolchildren, but only to

experience the disappointment and frustration after stultifying bureaucratic red-tape and heightened national security precautions prevent ever shipping the donated materials overseas. We would opine that this is a decidedly appropriate and eye-opening example of learning in the context of stone cold reality. To paraphrase what the disillusioned but alert poet Rimbaud had learned by the age of 19, "Action spoils everything."

Students in the science methods course [Robeck (2003)] also experienced disequilibria during their S-L project, but with guidance from their professor were able to transform their puzzlement into inchoate profundity. The instructor assigned students to work with the community partner, the local zoo, to create improved learning kits for local schoolchildren. The resulting project involved multiple participants including the elementary age students, their parents, their teachers, as well as staff from park zoo. Education students found that events during their on-site interactions with recipients produced dilemmas that approximated real-life teaching situations, and which provided rich metaphors that they had to decipher through reflection and classroom discussion. The science methods professor wrote the following in his final report:

The service-learning project...had the result of helping pre-service education students reconsider, and in some case, reconceptualize their understandings of the work of teaching. While...this result was initially unintended, it points to an important potential for service-learning in professional teacher education programs. (p.41, italics added)

Lastly, in the fifth course in the same department, encounters with "unintentional" learning illuminate a phenomenon that is oddly missing in the S-L theories that were presented during our preparatory workshops. Students in a Children's Literature methods course [Bond (2003)] identified the needs of English Language Learners (ELL) in local classrooms *during* the S-L experience rather than *prior* to it. Although this appears to stray from S-L orthodoxy it seems appropriate in the context of teacher education, especially when the project involves recipients with diverse backgrounds. In such courses teacher candidates are learning about diversity from interactions with the unknown (but not the unknowable).

I feel I learned more than [the student] did. I learned about a different culture and the daily struggles an ELL student faces....the only thing I would change about this opportunity is to make it a longer time than two weeks....I feel like I was only scratching the surface. (p. 50-51)

G. Now What?

Similar sequential patterns of S-L implementation commensurate with a course's position in the curriculum were also evident in professors' reports from the other two universities in the consortium as were unique encounters with unintentional learning experiences. Imagine if these professor in each departments were now to confer -- look at what they and their students did and then adjust and coordinate their S-L course designs so that students learn theory and practice within a developmental sequence of S-L activities. S-L competencies would be infused throughout the curriculum, certainly not loaded all at once in each course. An efficient model for S-L implementation in teacher

education would emerge from this coordinated approach, one that diminishes tendencies for fragmentation and vague outcomes.

H. Documentation of outcomes.

Though compelling the instructors' final reports [TECSL (2003)] contained vagueness about how and what students actually learned about doing S-L. For example, one professor's final report simply stated that, "Partnerships were established when students realized the need for classroom students to understand the need for [learning the skill]...." Without evidence to support how this exquisite outcome actually occurred, the connection between S-L competencies, course objectives, and what candidates actually learned was blurry. Such ambiguity could perhaps be prevented if S-L competencies were sequentially integrated across courses. When instructors can focus on fewer S-L objectives, would assessment become a more manageable prospect? This is another reason why teacher education departments need to consider during the planning stages where and how S-L fits into their curriculum and courses [cf. Swicke et al (1998)].

I. Impact on TE Pedagogy and Student Learning

On the other hand, there was convincing evidence in the professors' reports [TECSL (2003)] indicating that they experienced a compatible merger between S-L and teacher education, especially when pre-service teacher learned to see students with diverse backgrounds from a new perspective *and* then saw themselves changed by the experience. As they had implemented their projects over two and up to four semesters, professors began to report how surprised they were by the potential of S-L to affect students' personal and professional development. With each semester's S-L incarnation, professors tended to report how they had learned valuable and unexpected lessons about the nature of teacher preparation and some had adjusted their S-L projects to allow these effects to take on greater proportions. For example, Wiltz [TECSL (2003)] submitted a final reflection that captures the expansive and illuminating effects of S-L pedagogy in her teacher education courses:

This is actually my fourth semester to infuse service-learning into this course. Each semester, I seem to get more proficient at presenting the basic service-learning material in meaningful ways, and in ways that the whole concept makes sense to pre-service teachers. I am becoming much better at demonstrating how to incorporate the [State] Learning Outcomes or other content standards to validate the academic basis for this type of project in public primary grades....It is imperative that the students really do a project; it cannot be a hypothetical project....Next semester I am going to require a different type of reflective log, whereby each contact or action is dated and recorded as preparation, action, or reflection. I am also going to require reflection from a) student; b) the participants and c) those receiving service.

VI. Conclusion

Considering the nature and purpose of this unique consortium project – to integrate S-L in education courses – and considering the multiple components of S-L planning, implementation, and assessment combined with program constraints, department agendas, and the current climate of mandated standards of learning, it seems more than appropriate for beginners to consider efficient ways to manage the S-L process. Learn from our struggles and shortcomings as well as our substantial accomplishments. Had it been possible for the professors in each department to have coordinated S-L in incremental stages, perhaps they could have achieved a more manageable and complete model of infusion.

Because we struggled with a prominent learning curve in these initial attempts, we learned about the importance of preventing vagueness and fragmentation. "...[A] concern for quick and easy measurement often has usurped a concern for the meaningful content of what is measured, "[Winter, McClelland & Stewart in Eyler (2000), p.6].

To prevent vagueness, we urge beginners to make explicit in their list of S-L competencies that teacher candidates can distinguish between service-learning, volunteerism, internships, and clinical practica [Shumer (1997; 2000)]. Similarly we recommend that "P-A-R" (plan-act-reflect) be replaced with Shumer's (2000) expanded version, P-A-R-E (plan-act-reflect-evaluate), so that from the beginning teacher educators and their students grasp that S-L and evaluation are part of an inseparable process.

However, considering the unexpected outcomes that occurred in our projects we could make a case that S-L requires a high tolerance for ambiguity. Even though our S-L conceptual framework was our life raft so to speak, we learned through our collective efforts that S-L doesn't necessarily happen by copying models or by the limitations imposed by pre-ordained outcomes. As the professors' initial efforts clearly showed, they distilled S-L from the interactions between needs, growth, and reflection in real life contexts. As teacher educators we try to provide authentic learning opportunities for our pre-service teachers so they can experience the complex realities of teaching. S-L pedagogy provides this, in spite of its vulnerability to less than perfect planning, implementation, and assessment. To manage the delicate balance of action in the context of complexity, keep in mind a thought about learning from Carl Bereiter (1991), "we learn in the messy...way that nature seems bound to...." (p. 13).

References

Ball, D. (2002). S-L Assessment & evaluation. Lecture and PowerPoint presentation for TECSL workshop presented at Towson University, Towson, MD.

Ball, D. (2003). Chapter 3, Teacher education service-learning: Assessment. In *Learning to serve, serving to learn, A view from higher education*, (pp. 67-89). Salisbury University: Salisbury, MD.

Bereiter, C. (1991). Implications of connectionism for thinking about rules. *Educational Researcher*, 20, 10-16.

Bond, E. (2003). Using literature with English Language Learners: A service-learning project. In *Learning to serve, serving to learn, A view from higher education*, (pp. 49-51). Salisbury University: Salisbury, MD.

Bowden, C. (2003). Service-learning research and field experience reflection project. In

Learning to serve, serving to learn, A view from higher education, (pp. 17-20). Salisbury University: Salisbury, MD.

Brooks, E.H. (2003). Using service-learning to enhance academic excellence. In *Learning to serve, serving to learn, A view from higher education*, (pp. 52-53). Salisbury University: Salisbury, MD.

Darling-Hammond, L. & Snyder, J. (1998) Authentic assessment of teaching in context. In *Contextual teaching and learning: Preparing teachers to enhance student success in and beyond school*, (pp.253-294). ERIC Clearinghouse on Teaching and Teacher Education, AACTE.

Driscoll, A, Gelmon, S.B., Holland, B.A., Kerrigan, S, Spring, A, Grosvold, K., &

Longley, M.J. (1998). Assessing the impact of service-learning: A workbook of

strategies and methods. Center for Academic Excellence, Portland State University. ED432949.

Eyler, J.S. (2000). What do we most need to know about the impact of service-learning on student learning? retrieved 4/10/02. http://www.umich.edu/~mjcSL/volumes/researchsmple.html.

Eyler, J.S. & Giles, D.E. (2002). Beyond surveys: Using the problem solving interview to

"Assess the impact of service-learning on understanding and critical thinking." In Furco & Billig (Eds.) *Service-learning: The essence of the pedagogy*, (pp.147-160). Information Age Pub. Greenwich, CT. ED462631.

Furco, A. & Billig, S.H. (Eds.). (2002). Introduction. in *Service-learning: The essence of the pedagogy*. Information Age Pub. Greenwich, CT., (pp. vii-x). ED462631.

Geleta, N. E. (2003b). Service-learning: A focus on literacy. In *Learning to serve, serving to learn, A view from higher education*, (pp. 23-26). Salisbury University: Salisbury, MD.

Geleta, N. E., & Gilliam, M.A. (2003). Chapter 1, An introduction to service-learning. In

Learning to serve, serving to learn, A view from higher education, (pp. 9-13). Salisbury University: Salisbury, MD.

Gilliam, J. D. (2003). Service-learning into the arts and sciences curriculum. In *Learning to serve, serving to learn, A view from higher education*, (pp. 27-28). Salisbury University: Salisbury, MD.

Jenne, J. (2003). Social studies instruction. In *Learning to serve, serving to learn, A view from higher education*, (pp. 44-47). Salisbury University: Salisbury, MD.

Paris, S.G. & Winograd, P. (1998). The role of self-regulated learning in contextual teaching: Principles and practices for teacher preparation, in *Contextual teaching and learning: Preparing teachers to enhance student success in and beyond school*, (pp. 219-252). ERIC Clearinghouse on Teaching and Teacher Education, AACTE.

Robeck, E. (2003). Science instruction, zoo discover kits makes science go wild. In *Learning to serve, serving to learn, A view from higher education*, (pp. 40-43). Salisbury University: Salisbury, MD.

Root, S., Callahan, J., & Sepanski, J. (2002). Service-learning in teacher education: a consideration of qualitative and quantitative outcomes. In Furco & Billig (Eds) *Service-learning: The essence of the pedagogy*, (pp. 223-244). Greenwich, CT: Information Age Pub. ED462631.

Shastri, A. (1998). Examining academic learning outcomes in service-learning: Recent advances, unanswered questions, and guidelines. ED422300.

Santor, E. (2003). A service-learning project for master's degree cnadidatest. In *Learning to serve, serving to learn, A view from higher education*, (pp. 60-61). Salisbury University: Salisbury, MD.

Shumer, R. (1997). Teacher Education and service-learning: A critical perspective. In AAHE's series on service-learning in the disciplines, Teacher education volume, retrieved 4/3/03. http://www.aahe.org/members_only/S-L-shum.htm

Shumer, R. (2002). Service-learning as qualitative research: Creating curriculum from inquiry. In Furco & Billig (Eds), *Service-learning: The essence of the pedagogy*, (pp. 183-200). Greenwich, CT: Information Age Pub. ED462631.

Swick, K.J., Winecoff, H. L., Kemper, R. & others (1998). Service-learning and teacher education. Clemson University, ED430139.

TECSL (2002). TECSL learn & serve America grant evaluation: Year 1 grant goals: s-l workshop training. Salisbury, MD: D. Ball.

TECSL (2003). TECSL learn & serve America grant evaluation: Fall '02 s-l consortium courses. Salisbury, MD: D. Ball.

Teacher Education Consortium in Service-Learning. (2003). *Learning to serve, serving tolearn, A view from higher education*. Salisbury, MD: Salisbury University. Published online, July, 2003 http://www.servicelearning.org/article/archive/278

Wade, R. (1998). Community service learning: Collaborating with the community as a context for authentic learning, In *Contextual teaching and learning: Preparing teachers to enhance student success in and beyond school*, (pp.107-142). ERIC Clearinghouse on Teaching and Teacher Education, AACTE.

Wade, R.C. & Saxe, D.W. (1996). Community service-learning in the social studies: Historical roots, empirical evidence, critical issues. *Theory and Research in Social Education*, 24, 4, pp. 331-59.

Wade, R. & Yarborough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching & Teacher Education*, 12, 1, pp. 63-79.

Wiltz, N. (2003). Service-learning in early childhood education. In *Learning to serve*, serving to learn, A view from higher education, (pp. 33-37). Salisbury. MD: Salisbury University.